



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,564	12/27/2005	Seiji Kubo	3.0-033	8359
7590	04/27/2010		EXAMINER	
Michael E Zall Two Yorkshire Drive Suffern, NY 10901			PRANGE, SHARON M	
			ART UNIT	PAPER NUMBER
			3728	
			MAIL DATE	DELIVERY MODE
			04/27/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/562,564	KUBO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	SHARON M. PRANGE	3728	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08 January 2010.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-41 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .                                                        | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

This is in response to Applicant's Amendment in which claims 1, 2, and 19 are amended, and claims 20-41 are added.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 35 and 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 35, there is no support for a shoe sole which contains a film-like member affixed to the bottom surface of the first arch in combination with a midsole which has an upper and lower midsole in the original Specification.

Regarding claims 36, there is no support for a shoe sole which contains a film-like member affixed to the bottom surface of the first arch in combination with a second reinforcing member in the original Specification.

***Claim Rejections - 35 USC § 103***

3. Claims 1-9, 11-13, 15-30, 32-34, and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kita (US Patent Application No. 2003/0005600), herein Kita '600.

Regarding claims 1-3, 5, 16-20, 23, 24, 26, and 37-39, Kita '600 discloses a shoe sole having an outer sole (outsoles 4, 5), a midsole (3) attached to the outer sole, and a reinforcing member (lower portion 22 of shank member 20). The midsole has a first arch formed of a resin foam. The reinforcing member has a second arch covered by the first arch. The reinforcing member is arranged so that the top surface of the second arch is not in contact with part of the bottom surface of the first arch; the two arches are vertically spaced from one another. The non contact areas of the arches can therefore deform independently of one another. The first and second arches form four curved surfaces (paragraphs 0033, 0045; Fig. 5, 12-14).

Regarding claims 4, 6, 8, 12, 25, 27, 29, and 33, Kita '600 discloses that the reinforcing member has two side portions (22a) on the medial and lateral sides which are bonded to the midsole so that the entire peripheral edge of the member is bonded to the midsole (paragraph 0050; Fig. 12-14).

Regarding claims 11 and 32, Kita '600 discloses that the first arch may be made of foam of ethylene-vinyl acetate polyurethane and the reinforcing member may be made of non-foam of polyurethane (paragraphs 0034, 0036).

Regarding claims 13 and 34, Kita '600 discloses that the outer sole is separated into a fore foot part (5) and a rear foot part (4). The fore end and rear ends parts of the reinforcing member are sandwiched between the outer sole and the midsole (Fig. 5).

Regarding claims 15 and 36, Kita '600 discloses a second reinforcing member (portion 21) (paragraph 0045).

Kita '600 does not specifically disclose that the reinforcing member has a Young's modulus greater than that of the first arch of the midsole. Kita '600 does disclose that the reinforcing member provides increased rigidity and is made of thermoplastic resin as opposed to the soft elastic material of the midsole. It would have been obvious to one of ordinary skill in the art at the time of the invention to have made the Young's modulus of the reinforcing member greater than that of the first arch in order to allow the reinforcing member to provide a greater rigidity than the midsole.

Regarding claims 20 and 23, Kita '600 discloses a member (upper portion 21 of shank member 20) which is affixed to the bottom surface of the first arch. Kita '600 does not disclose that the member is thinner than the second arch of the reinforcing member. However, Kita '600 does disclose that the two portions (21, 22) may be made of different materials (paragraph 0045, lines 10-12), therefore giving the two portions differing characteristics which allows the cushioning characteristics of the shank member to be customized to the need of different shoes. It would have been obvious to one of ordinary skill in the art at the time of the invention to have made the upper portion of a thinner material than the lower portion (for example, a film-like material) in order to

allow the two portions to have different characteristics, allowing for greater customization of the cushioning characteristics of the shank member.

Regarding claims 21, 22, 40, and 41, Kita '600 discloses the general conditions of the claimed invention except for the express disclosure of the thickness of the film-like member, and the ratio of the product of the average thickness and Young's modulus of the film-like member to the product of the average thickness and Young's modulus of the second arch. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the thickness of the film-like member between 0.01-0.5 mm, and the ratio between the film-like member and the second arch between 1/1000 and 1/4, since the claimed values are merely an optimum or workable range. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

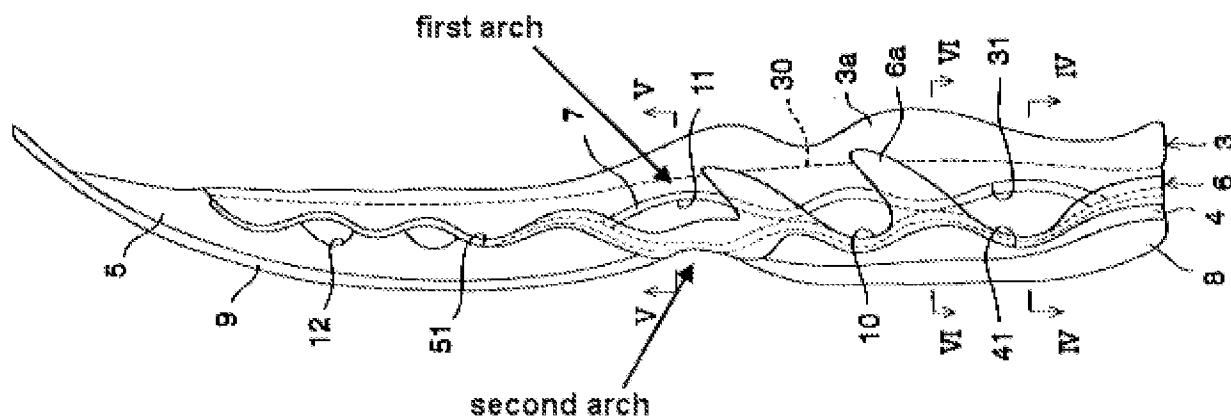
4. Claims 10 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kita '600, as applied to claims 1-9, 11-13, 15-30, 32-34, and 37-41, in view of Polifroni (US Patent No. 6,854,199).

Kita '600 does not disclose an opening passing vertically through the second arch. Polifroni teaches providing openings (holes 66) passing vertically through a support member in order to allow ventilation through the piece to cool a wearer's foot. It would have been obvious to one of ordinary skill in the art at the time of the invention to

have provided openings, as taught by Polifroni, to the reinforcing member of Kita '600 in order to allow ventilation to cool a wearer's foot.

5. Claims 1-6, 11, 12, 14, 15, and 17-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Kita (US Patent No. 6,625,905), herein Kita '905.

Regarding claims 1-3, 5, and 17-19, Kita '905 discloses a shoe sole having an outer sole (outsoles 8, 9), a midsole (3, 4, 5) attached to the outer sole, and a reinforcing member (lower corrugated sheet 6). The midsole has a first arch formed of a resin foam. The reinforcing member has a second arch covered by the first arch. The reinforcing member is arranged so that the top surface of the second arch is not in contact with part of the bottom surface of the first arch; the two arches are vertically spaced from one another. The non contact areas of the arches can therefore deform independently of one another. The first and second arches form four curved surfaces (column 4, lines 17-27; Fig. 3).



Regarding claims 4, 6, and 12, Kita '905 discloses that the reinforcing member has two side portions (flanges 6a) on the medial and lateral sides which are bonded to the midsole (column 5, lines 14-18; Fig. 3).

Regarding claim 11, Kita '905 discloses that the first arch may be made of foam of ethylene-vinyl acetate polyurethane and the reinforcing member may be made of non-foam of polyurethane (column 4, lines 31-40).

Regarding claim 14, Kita '905 discloses that the midsole has upper (3) and lower (4, 5) midsole bodies. The reinforcing member is sandwiched between the upper and lower bodies (Fig. 3).

Regarding claim 15, Kita '905 discloses a second reinforcing member (corrugated sheet 7) (column 4, lines 23-27; Fig. 3).

Kita '905 does not specifically disclose that the reinforcing member has a Young's modulus greater than that of the first arch of the midsole. Kita '905 does disclose that the reinforcing member provides increased rigidity and is made of thermoplastic resin as opposed to the soft elastic material of the midsole. It would have been obvious to one of ordinary skill in the art at the time of the invention to have made the Young's modulus of the reinforcing member greater than that of the first arch in order to allow the reinforcing member to provide a greater rigidity than the midsole.

### ***Response to Arguments***

6. Applicant's arguments filed 1/8/10 have been fully considered but they are not persuasive.

Regarding the rejection over Kita '600, Applicant argues that the upper portion 21 of the shank member 20 is attached to the bottom portion of the midsole, and this in contrast to the claims. However, as stated in paragraph 3 above, the reinforcing member is only considered to be the lower portion 22. The upper portion 21 is not considered to be a part of the reinforcing member. Fig. 5 clearly shows that the lower portion 22 is not attached to or in contact with the bottom portion of the first arch. Regarding the rejection over Kita '905, Applicant similarly argues that the second corrugated sheet 7 is in contact with and bonded to the bottom surface of the midsole. However, as stated in paragraph 5 above, the reinforcing member is only considered to be the lower corrugated sheet 6. The second corrugated sheet 7 is not considered to be a part of the reinforcing member. Fig. 3 clearly shows that the lower corrugated sheet 6 is not attached to or in contact with the bottom portion of the first arch. The fact that the references disclose additional structure not claimed is irrelevant.

Applicant argues that the high rigidity of the arch portions of the midsoles in both references prevents any substantial alleviation of the upthrust feeling to a wearer's sole upon landing. This limitation is not included in the claims.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHARON M. PRANGE whose telephone number is (571)270-5280. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on (571) 272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. M. P./ 4/24/10  
Examiner, Art Unit 3728

/Mickey Yu/  
Supervisory Patent Examiner, Art  
Unit 3728